

REMARKS

Claims 1-3 and 6 are amended herein.

I. Response to Claim Rejections under 35 U.S.C. § 102

In paragraph 2 of the Office Action, the Examiner has rejected claims 1 and 6 under 35 U.S.C. § 102(b) as being anticipated by Deevi et al (U.S. 5,498,855).

Applicants respectfully traverse the rejection.

The present invention as recited in amended claim 1 is characterized in that a heater and electrodes are respectively made consisting essentially of silicon carbide, and the heater and the electrodes are integrally constructed with the use of a binder made consisting essentially of silicon carbide. Thus, all heat conductivity of the heater, the electrodes and binder is the same.

Deevi discloses a heater comprising the same material (SiC included). However, Deevi does not teach or fairly suggest a component corresponding to the electrode according to the present invention.

Further, Deevi does not disclose the technology for using the joining material having the degree of heat conductivity equal to that of the heater in order to reduce the difference of the heat conductivity between the members as recited in the present invention.

Based on the disclosure of Deevi (see e.g., claims 16, 19 and 47), the ceramic material includes various other ingredients in addition to SiC. Thus, Deevi does not disclose a ceramic material consisting essentially of SiC as recited in the amended claims and cannot be said to anticipate the present invention.

Accordingly, Applicants respectfully request withdrawal of the §102 rejection.

II. Response to Claim Rejections under 35 U.S.C. § 103

In paragraph 3 of the Office Action, the Examiner has rejected claims 1-6 under 35 U.S.C. § 103(a) as being unpatentable over Kano et al (U.S. 6,384,383) or Murakami (U.S. 5,462,603) in view of Deevi et al (U.S. 5,498,855) or Divakar et al (U.S. 2002/0185487).

Applicants respectfully submit that the cited references, whether taken alone or in combination, do not teach or fairly suggest the presently claimed invention.

The Examiner asserts that Kano et al. disclose a susceptor and Murakami discloses a reflection plate and an insulation plate and the combination of these references with Deevi and Divakar leads to the present invention. However, Deevi does not disclose all elements of the present claims for the reasons set forth above. Further, Divakar fails to disclose the joining material and also fails to disclose a method of eliminating the difference of heat conductivity (temperature difference) by using the joining material. Thus, even if the cited references could somehow have been combined, the present invention would not have been achieved.

Further, Applicants submit that the present invention provides unexpectedly superior results. As stated above, the present invention is characterized in that the heater and the electrodes are respectively consisting essentially of silicon carbide, and the heater and the electrodes are integrally constructed with the use of a binder consisting essentially of silicon carbide. Thus, all heat conductivity of the heater, the electrodes and the binder is the same. Due to the construction of the present invention, unexpectedly superior results are obtained as described in paragraph [0008] at page 5 of the specification. Specifically, the specification describes:

In the first embodiment, the heater 1 and the electrodes 2 are made of a material containing silicon carbide, and are integrally formed with the use of a binder made of a material containing silicon

carbide. Because of such a construction, the aforesaid problem such as release of an impurity at the time of heating is solved, thereby improving the purity. Also, since the thermal characteristics of the heater 1 and the binder are the same, there will be no difference in temperature between the heater 1 main body and the part joined to the electrodes 2, thereby improving the thermal uniformity. Further, there will be no fear of cracks that have been generate due to the difference in the thermal characteristics of the heater members (emphasis added).

For at least this additional reason, the present invention is patentable.

Accordingly, Applicants respectfully request withdrawal of the §103 rejections.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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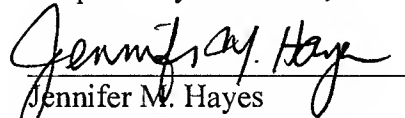
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